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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,821	09/11/2003	Gordon Burns	1505-0158	7351

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EXAMINER

BENSON, WALTER

ART UNIT

PAPER NUMBER

2858

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/661,821	Applicant(s) BURNS ET AL.	
	Examiner Walter Benson	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are presented for examination.

Specification

2. The disclosure is objected to because of the following informalities:
 - i. page 3, line 1, transformer coils 16 are not shown in the figures;
 - ii. page 5, detail description, lines 1, 2, 3, meter 100 is not shown in any of the figures;
 - iii. page 6, lines 18 and 19, line "114a Fig. 3" appears to be line 114a Fig. 2;
 - iv. page 7, line 13, openings 130, does not appear to be shown in Fig. 3;
 - v. page 8, line 21, contact output 144c appears in Fig. 4 and not in Fig. 3;
 - vi. page 16, line 4, describes items 144a and 144b in Fig. 4 of which they do not appear in Fig. 4.

This is only a sample of the errors that are too numerous to list in total.

Appropriate correction is required.

Drawings

3. The drawings [Figure 3] are objected to because item 150a is not shown. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include

Art Unit: 2858

all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Slater et al. (US Patent No. 6,275,168 and Slater hereinafter).

Art Unit: 2858

6. As to claim 1, Slater discloses configurable buss element for an electricity meter, the buss element comprising:

a conductive piece of metal formed into a series of contact connectors and a network of elongate conductors extending between and among the series of contact connectors [Fig. 1; col. 8, lines 48-55], each of the plurality of contact connectors configured to contact a circuit element of an electricity meter [col. 10, lines 44-48], the network of elongate conductors operable to provide connectivity between the contact connectors and select portions of the conductive piece of metal in one of a plurality of connectivity configurations [col. 4, lines 23-29], each of the connectivity configurations corresponding to an electricity meter configuration, the select one of the plurality of connectivity configurations defined by a predetermined set of discontinuities introduced in the network of elongate conductors (col. 4, lines 28-29).

7. As to claim 9, Slater discloses a method of forming a connection between at least one sensor device of an electricity meter and at least one electrical component disposed on a circuit board [col. 6, lines 25-36], the method comprising:

a) providing a conductive piece of metal formed into a series of contact connectors and a network of elongate conductors extending between and among the series of contact connectors (col. 8, lines 48-55);

b) introducing one of a plurality of sets of discontinuities in the network elongate conductors, each of the plurality of sets of discontinuities in the network elongate conductors corresponding to one of a plurality of meter configurations (col. 4, lines 23-29);

Art Unit: 2858

c) disposing at least part of a sensor device within one of a plurality of contact connectors formed in a conductive piece of metal (col. 4, lines 30-38).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slater in view of Fye et al. (US Patent No. 6,734,663 and Fye hereinafter).

Although the system disclosed by Slater shows substantial features of the claimed invention (discussed in the paragraphs above), it fails to disclose:

a plastic housing affixed to the conductive piece of metal [claims 2, 10];

where the plastic housing includes a first set of openings corresponding to the contact connectors [claims 3, 11];

where the plastic includes a set of indicia, the set of indicia disposed above select portions of the network of elongate connectors, the select portions of the network of elongate connectors constituting locations at which discontinuities may be introduced to form any of the plurality of connectivity configurations [claims 4, 12];

a plastic housing overmolded onto the conductive piece of metal (claims 5, 13);

Art Unit: 2858

where the conductive piece of metal comprises a phosphor bronze stamping [claims 6, 14];

where at least one of the contact connectors is configured to receive a meter blade, the meter blade having an end configured to be received by a standard electricity meter socket [claim 7];

where the conductive piece of metal is further formed into connector contact pads formed in the network of elongate conductors [claim 9].

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Slater, as evidenced by Fye.

Fye discloses a solid-state electricity meter that measures a current applied to a load having:

a plastic housing affixed to the conductive piece of metal [claims 2, 10] (col. 4, lines 9-15);

where the plastic housing includes a first set of openings corresponding to the contact connectors [claims 3, 11] (col. 4, lines 9-15);

where the plastic includes a set of indicia, the set of indicia disposed above select portions of the network of elongate connectors, the select portions of the network of elongate connectors constituting locations at which discontinuities may be introduced to form any of the plurality of connectivity configurations [claims 4, 12] (col. 4, lines 9-15);

a plastic housing overmolded onto the conductive piece of metal (claims 5, 13] (col. 9, lines 9-15);

Art Unit: 2858

where the conductive piece of metal comprises a phosphor bronze stamping [claims 6, 14] (col. 3, lines 53-58);

where at least one of the contact connectors is configured to receive a meter blade, the meter blade having an end configured to be received by a standard electricity meter socket [claim 7] (col. 3, lines 51-52);

where the conductive piece of metal is further formed into connector contact pads formed in the network of elongate conductors [claim 9] (col. 8, lines 48-55).

Given the teaching of Fye, a person having ordinary skill in the art at the time of the invention would have readily recognized the desirability and advantages of modifying Slater by employing the well known or conventional features of meter technology, such as disclosed by Fye, in order to efficiently provide for economical manufacture, maintenance, and modification in the Slater system.

Prior Art Made of Record

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Balko et al. (US Patent No. 6,972,555) discloses an electricity meter that includes configurable sensing blades.


Art Unit: 2858

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter Benson whose telephone number is (571) 272-2227. The examiner can normally be reached on Mon to Fri 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Walter Benson
Primary Examiner

November 7, 2006